

Amendments to the Claims

Claim 1 (Currently Amended) A core structure of a heat exchanger, the core structure comprising:

a plurality of tubes in through which a heat exchange medium flows is to flow;
a plurality of corrugated fins adhering to said tubes to radiate heat from the heat exchange medium through said tubes; and
a plurality of seat sheet plates arranged opposite to each other with a predetermined space interposed therebetween and having said tubes and said corrugated fins arranged alternately therebetween, said sheet seat plates being provided with connection portions having main body portions and wall portions slanted—with a predetermined slant angle from said main body portions thereof toward said tubes and being formed with tube holes through which said tubes are inserted to be fixed, wherein when said tubes have a wall thickness of 0.13 mm to 0.23 mm, and
a slant angle θ between of the connection portions is and the main body portions of said seat plates satisfies the following relationship:

the slant angle θ ($^{\circ}$) $\geq 25 \times (\text{a thickness (mm) of sheet plate said seat plates}) + (-125 \times (\text{the wall thickness (mm) of tube said tubes}) + 25).$

Claim 2 (New) A core structure of a heat exchanger according to claim 1,

wherein said connection portions also have vulnerable portions connected in series with said wall portions, said vulnerable portions being thinner than said wall portions.

Claim 3 (New) A core structure of a heat exchanger according to claim 2,

wherein said vulnerable portions are formed at at least one of positions between said main body portions and said wall portions and positions between said wall portions and the tube holes.

Claim 4 (New) A core structure of a heat exchanger according to claim 2,

Wherein said vulnerable portions comprise first and second vulnerable portions which are thinner than said main body portions and said wall portions and in series on said wall portions, said vulnerable portions being adapted to absorb thermal stress of said seat plates against said tubes by bending, and said first and second vulnerable portions being formed at a position between said wall portions and the tube holes and a position between said main body portions and said wall portions, respectively.

Claim 5 (New) A core structure of a heat exchanger according to claim 4,
wherein the tube holes are positioned at a position further from said main body portions than said wall portions and said first and second vulnerable portions.

Claim 6 (New) A core structure of a heat exchanger according to claim 2,
wherein the tube holes are positioned at a position further from said main body portions than said wall portions and said vulnerable portions.